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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/695,914	10/30/2003	Kazuaki Tashiro	03560.003021.1	5646
5514	7590	10/28/2005	EXAMINER	
FITZPATRICK CELLA HARPER & SCINTO			HO, ALLEN C	
30 ROCKEFELLER PLAZA			ART UNIT	
NEW YORK, NY 10112			PAPER NUMBER	
			2882	

DATE MAILED: 10/28/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

4-A

<b>Office Action Summary</b>	<b>Application No.</b>	<b>Applicant(s)</b>	
	10/695,914	TASHIRO ET AL.	
	<b>Examiner</b>	<b>Art Unit</b>	
	Allen C. Ho	2882	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 09 August 2005.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 20 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 20 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 30 October 2003 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All    b) ☐ Some \*    c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |   |   |
|---|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)                        | 4) <input type="checkbox"/> Interview Summary (PTO-413)                     |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)    | Paper No(s)/Mail Date. _____  |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| Paper No(s)/Mail Date _____   | 6) <input type="checkbox"/> Other: _____                                    |

## DETAILED ACTION

### *Drawings*

1. The drawings are objected to under 37 CFR 1.83(a). The drawings must show every feature of the invention specified in the claims. Therefore, an imaging element that comprises a first planarization layer covering the external terminal, a second planarization layer on the first planarization layer, and a substrate on the second planarization layer via an adhesive layer must be shown or the feature(s) canceled from the claim(s). No new matter should be entered.

Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The figure or figure number of an amended drawing should not be labeled as “amended.” If a drawing figure is to be canceled, the appropriate figure must be removed from the replacement sheet, and where necessary, the remaining figures must be renumbered and appropriate changes made to the brief description of the several views of the drawings for consistency. Additional replacement sheets may be necessary to show the renumbering of the remaining figures. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either “Replacement Sheet” or “New Sheet” pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

***Claim Objections***

2. Claim 20 is objected to because of the following informalities:

It is recommended that the last step be replaced by --forming a substrate, on which a scintillator is formed, on said second planarization layer via an adhesive layer.--

Appropriate correction is required.

***Claim Rejections - 35 USC § 112***

3. The following is a quotation of the first paragraph of 35 U.S.C. 112:.

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

4. Claim 20 is rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention.

Claim 20 recites a method that comprises the steps of forming a first planarization layer which cover an external terminal and forming a second planarization layer on the first planarization layer. However, this method is not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention. The applicants disclosed a method that comprises the step of forming a first planarization layer, which covers an external terminal (paragraph [0056]). However, the applicants did not disclose a step of forming a second planarization layer on the first planarization layer (Fig. 5). Although the applicants disclosed a

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step of forming a second planarization layer (1062) on the first planarization layer (1061), the first planarization layer does not cover the external terminal (Figs. 10 and 11).

***Claim Rejections - 35 USC § 102***

5. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

6. Claim 20 is rejected under 35 U.S.C. 102(e) as being anticipated by Kajiwara *et al.* (U. S. Patent No. 6,800,857 B2).

With regard to claim 20, Kajiwara *et al.* disclosed a method of manufacturing a radiation imaging apparatus comprising: a plurality of imaging elements (1A) comprising each a plurality of pixels (101) and an external terminal (5), wherein a lead (401) constituting the external terminal is extended to the side opposite to a light receiving surface each of the image element through a space between the adjacent imaging elements; comprising the following steps of: forming the first planarization layer (6) which covers the external terminal, on the light receiving surface and covering; forming the second planarization layer (2A) on the first planarization layer; and forming a substrate which a scintillator (3) is formed on the second planarization layer via a adhesive layer (7).

### ***Double Patenting***

7. The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. See *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent is shown to be commonly owned with this application. See 37 CFR 1.130(b).

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

8. Claim 20 is rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 1, 10, 14, and 18 of U.S. Patent No. 6,671,347 B2. Although the conflicting claims are not identical, they are not patentably distinct from each other because claim 20 recites method steps that are obvious in view of claims 1, 10, 14, and 18 of U.S. Patent No. 6,671,347 B2.

U. S. Patent No. 6,671,347 B2 claims a radiation imaging apparatus comprising: a first planarization layer on the light receiving surface to be positioned at the same height as the external terminal (claim 10); a second planarization layer on the first planarization layer formed on the external terminal and the first planarization layer (claim 10); and a substrate, on which a scintillator is formed (claim 18), on the second planarization layer via an adhesive layer (claim 14).

Although claim 10 does not claim a first planarization layer that covers the external terminal, claim 10 does not exclude this possibility. This arrangement is supported by claim 1, which claims a wavelength converter formed on the plurality of spaced apart imaging elements

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and the external terminal through a planarization layer, *i. e.*, the external terminal is covered by a first planarization layer.

It would have been obvious to a person of ordinary skill in the art at the time the invention was made to provide a first planarization layer that covers the external terminal, since a person would be motivated to provide a planarized surface to support a scintillator either at the first planarization layer or at the second planarization layer.

### *Response to Arguments*

9. Applicant's arguments, filed 05 July, with respect to claim 20 have been fully considered and are persuasive. The rejection of claim 20 under 35 U.S.C. 112, first paragraph, has been withdrawn.

10. Applicant's arguments, filed 05 July, with respect to claim 20 have been fully considered and are persuasive. The rejection of claim 20 under 35 U.S.C. 112, second paragraph, has been withdrawn.

11. Applicant's arguments filed 05 July 2005 have been fully considered but they are not persuasive.

With regard to the drawings, the applicants argue that Fig. 5 shows an external terminal (120) covered by a first planarization layer (105). This argument is not persuasive. Fig. 5 does not show a second planarization layer on the first planarization layer, nor does it show an adhesive layer between a substrate (106) and a scintillator (107) as claimed in claim 20. The objection is being maintained.


With regard to the 102(e) rejection, the applicants argue that U. S. Patent No. 6,800,857 B2 is not prior art because they claim the filing date of Japanese Application No. 2001-132349. This argument is not persuasive. The applicants are not entitled to this priority date because the claimed subject matter is not disclosed on this date. Therefore, the rejection is being maintained.

### *Conclusion*

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Allen C. Ho whose telephone number is (571) 272-2491. The examiner can normally be reached on Monday - Friday from 8:00 am - 5:00 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Edward J. Glick can be reached at (571) 272-2490. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

  
Allen C. Ho  
Primary Examiner  
Art Unit 2882

25 October 2005